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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,711	07/03/2003	Yoshifumi Kato	5000-5109	5026

27123 7590 02/09/2007

MORGAN & FINNEGAN, L.L.P.
3 WORLD FINANCIAL CENTER
NEW YORK, NY 10281-2101

EXAMINER	
VU, PHU	
ART UNIT	**PAPER NUMBER**
2871	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/613,711	KATO ET AL.	
	Examiner	Art Unit	
	Phu Vu	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *21 November 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *21-52* is/are pending in the application.

4a) Of the above claim(s) *21-32 and 41-46* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *33-40 and 47-52* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 33-40 and 47-52 have been considered but are moot in view of the new ground(s) of rejection made on an alternative embodiment of Shirasaki (see below).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 33-35, 38-40, 47-49 and 52 are rejected under 35 U.S.C. 103(a) as being obvious over Shirasaki 6025894.

Regarding claim 33 and 34 and 47-48, Shirasaki teaches a display with lighting system comprising: a substrate; a transparent electrode (fig 32 element 112) located on the substrate; an electroluminescent layer (114) located on the transparent electrode, a reflective electrode (113) located on the electroluminescent layer, a scattering portion (120) for scattering light, wherein the scattering portion is located between the substrate and the electroluminescent layer inclusive such that light is scattered before and after it is reflected from the reflective electrode. Shirasaki also teaches passivation layer (see fig: 32 element 115) located on the reflective electrode that seals the electrode from air and water (see column 15 lines 39-51). In this embodiment the scatter control layer

functions as a substrate as the electrodes ands passivation layer is attached to it and sealed via the passivation layer, thus the transparent electrode, electroluminescent layer, and reflective electrodes are supported by the substrate.

Shirasaki omits a teaching of a display unit located on the light unit in this embodiment, however this is clearly shown in multiple other embodiments (figs. 35, 36) as the light source is designed to function as the backlight of a liquid crystal panel (see abstract). Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to attach the light source to a display panel to provide backlighting.

Regarding claim 35 and 49, the reference teaches scattering portion at an interface between the transparent electrode and substrate (see fig. 32).

Regarding claim 38-39, the reference teaches the electroluminescent layer performs electroluminescence (light emission) when voltage is applied between the reflective and transmissive electrodes (see abstract). The entire electroluminescent layer is formed between the two electrodes therefore, the entire electroluminescent layer will emit light when a voltage is applied between the electrodes.

Regarding claim 40 and 52, the reference teaches the electroluminescent layer includes an organic electroluminescent material (see abstract).

Claims 36 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shirasaki in view of Kaminsky 6636363.

Regarding claims 36 and 50, Shirasaki teaches all the limitations of claim 38 except the scattering portions being concavities and convexities. Kaminsky teaches a

diffuser for backlights (see abstract) that uses a plurality of concavities and convexities (see cover fig) with improved light transmission while simultaneously diffusing specular light sources (see column 2 lines 64-68). Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to apply a light scattering portion that uses concavities and convexities in order to improve light transmission while maintaining scattering.

Claims 37 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shirasaki in view of Yano 2001/0002153.

Regarding claims 37 and 51, Shirasaki teaches all the limitations of claim 37 except, a scattering layer wherein the scattering bodies are minute particles. Yano teaches an adhesive type diffusion layer that uses particles of varying refractive indexes that provides excellent balance between light transmittance and a diffusing characteristic providing excellent visibility when applied to LCDs [see 0006]. Yano's diffuser also acts as an adhesive. Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to apply a scattering body which uses minute particles for scattering to improve excellent visibility which also eliminates the need for a separate adhesive for attachment.

Conclusion

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phu Vu whose telephone number is (571)-272-1562. The examiner can normally be reached on 8AM-5PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (571)-272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Phu Vu
Examiner
AU 2871

ANDREW SCHECHTER
PRIMARY EXAMINER